

## **Historic, Archive Document**

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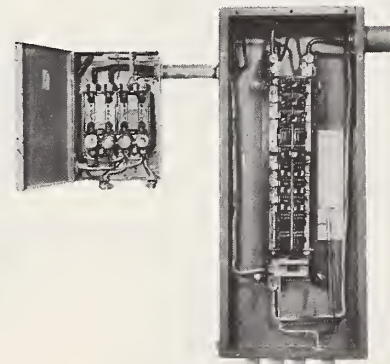
# expandable

**DON'T RIP THIS OUT !**

If your present electrical wiring is inadequate for your increasing lighting and appliance load, add more circuits by EXPANDING your electrical wiring system -- like this

**YOU CAN SAVE MONEY** by expanding your wiring system as your electrical load grows!

If the service panel (fuse box) in your house is inadequate for your electrical load, it may be used as a part of AN EXPANDABLE WIRING SYSTEM,



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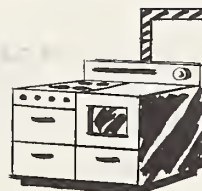
## EXPAND YOUR ELECTRIC WIRING SYSTEM BY ADDING ANOTHER SERVICE PANEL!

### HERE IS WHAT TO DO--

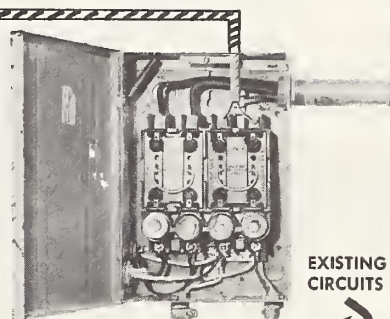
1. Add up your present load for each electrical circuit.

- You can ask the office of your rural electric system to send out someone to do this for you; or
- You can hire an electrical contractor to do this, or
- You can do it yourself by following these steps:

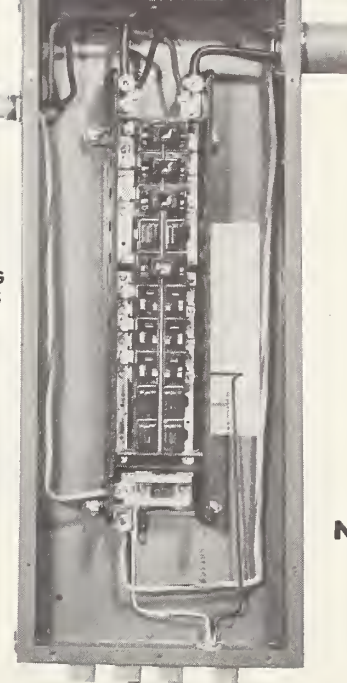
- a. Make a sketch of the outlets on each circuit. This is easily done by removing one fuse or opening one circuit breaker at a time on the service panel and marking on paper a diagram of the outlets that do not function with the fuse removed or the circuit breaker opened.
- b. Add up the load (watts) of the light bulbs and appliances used on each circuit.
- c. See if the total load (watts) on any circuit exceeds the maximum that it can carry.



RANGE



EXISTING  
CIRCUITS



New  
Circuits

The safe maximum for each general-purpose circuit is 1800 watts if #14 wire has been installed. General-purpose circuits carry electricity to lights and low-wattage appliances such as the radio, fan, vacuum cleaner, and electric razor. A 15-amp fuse is used for this circuit.

The safe maximum for each kitchen-appliance circuit that is a two-wire circuit of #12 wire is 2400 watts. Kitchen-appliance circuits are used for the refrigerator, toaster, coffee maker, electric skillet, etc. A 20-amp fuse is used for this circuit.

A dishwasher, automatic clothes washer, room air conditioner, automatic heating plant, and similar equipment operating on 120 volts, each take a separate circuit. High-wattage equipment, such as an electric range, electric clothes dryer, electric water heater, and space heater, require separate circuits of 240 volts. Each of these individual equipment circuits uses heavier wire (#12 to #6) and some should have special grounding. The fuse rating depends on the size of the wire and the load to be carried; it may be from 20 to 50 amps.

2. Now--how much load do you want to add beyond the present capacity of your existing system? Get this figure by adding the watts marked on new equipment and lights you want to include.

3. Get in touch with the office of your rural electric system and let the electrification adviser help you figure how many additional circuits you need to add to your wiring system. In some cases the wires that bring electricity to the house from the high-line may have to be changed. Your rural electric supplier will take care of this.

4. Now call in your electrical contractor. He can expand your wiring system by adding the new service panel and installing new service wires. This should provide ample capacity for new-equipment circuits you need, in addition to supplying current to the circuits connected to your old service panel. Expanding your wiring system costs less than rewiring your house.

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